



**PATENT APPLICATION # 8**

*Ltd to draftman  
KT  
5-202*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Michael NAHUM et al.

Group Art Unit: 2877

Application No.: 09/731,671

Examiner:

Filed: December 18, 2000

Docket No.: 106539

For: SYSTEM AND METHOD FOR HIGH-ACCURACY DISPLACEMENT  
DETERMINATION IN A CORRELATION BASED POSITION TRANSDUCER

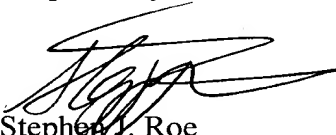
**LETTER TO THE OFFICIAL DRAFTSPERSON**

Director of the U.S. Patent and Trademark Office  
Washington, D.C. 20231

Sir:

Please substitute the attached 16 sheets of formal drawings depicting Figures 1-20 for  
the corresponding informal drawings filed with the application.

Respectfully submitted,

  
Stephen J. Roe  
Registration No. 34,463

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**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
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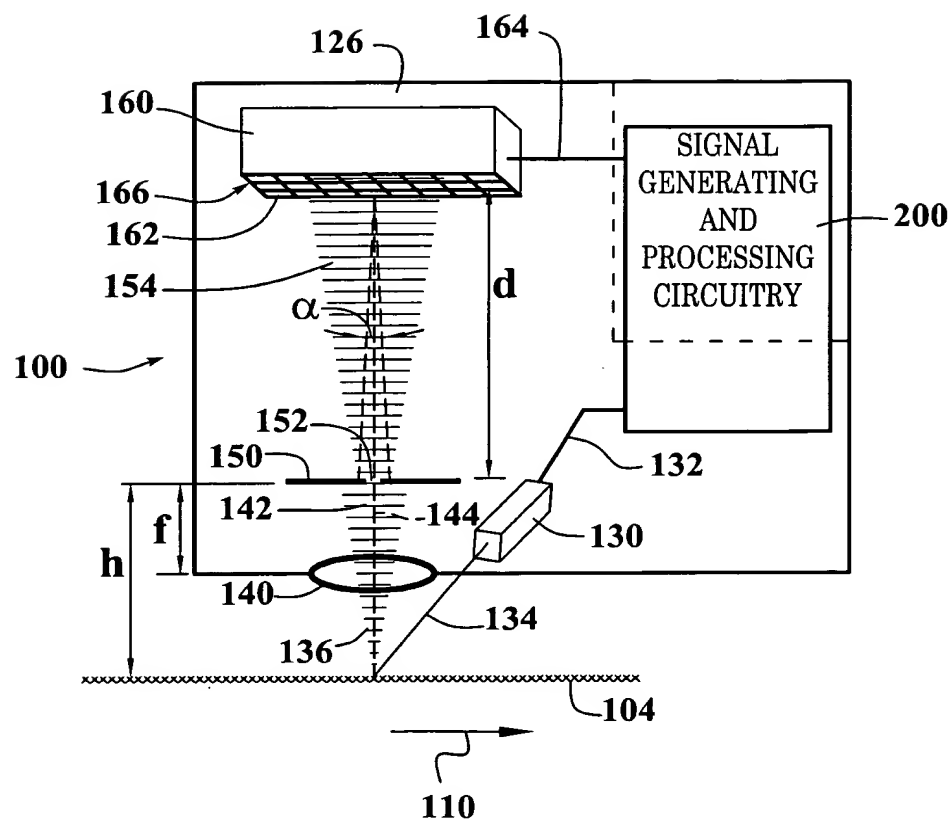
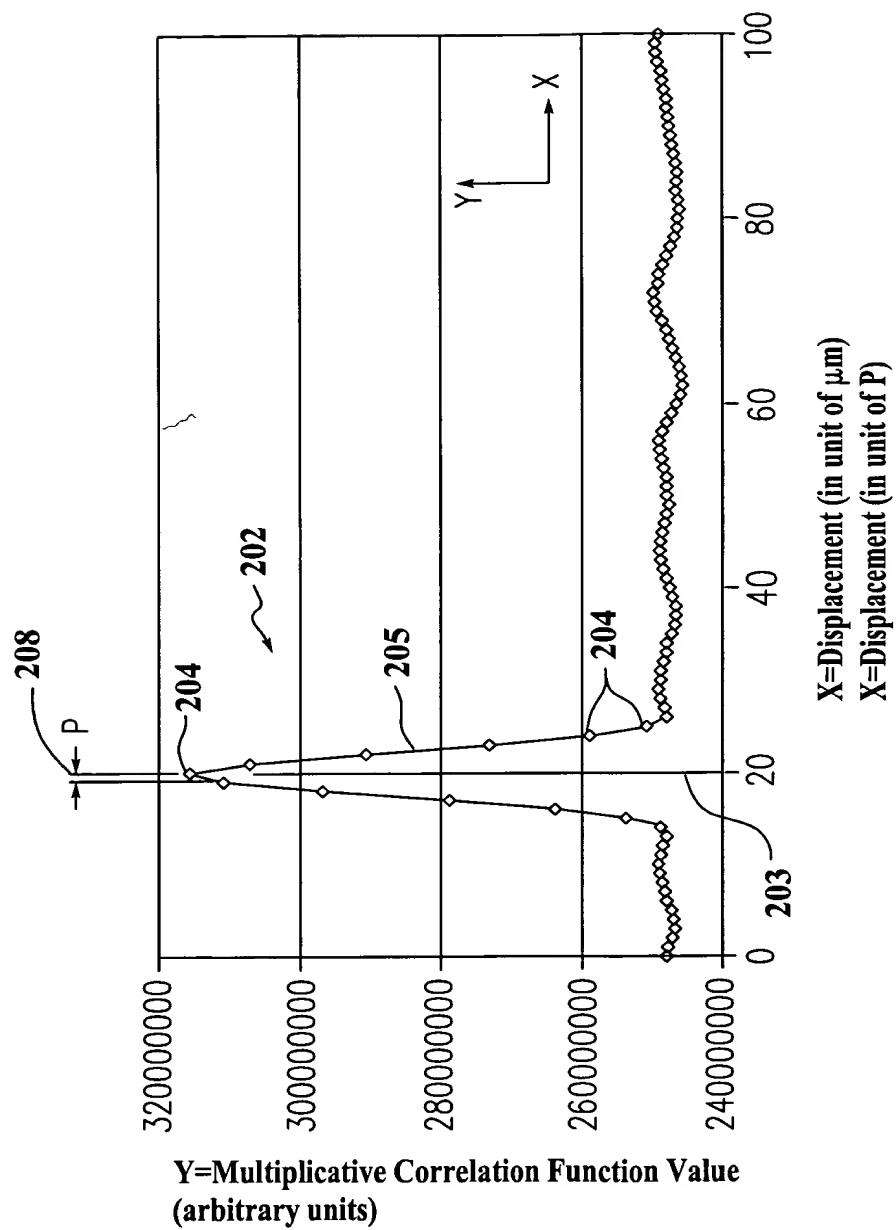
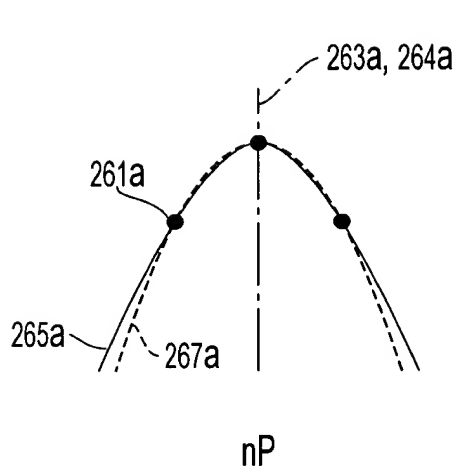


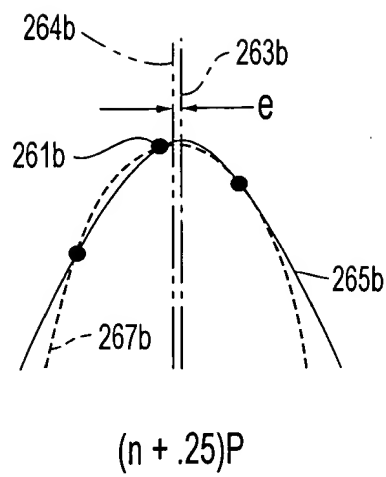
FIG. 1



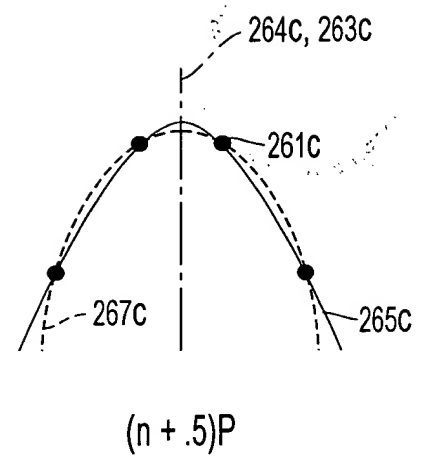
**FIG. 2**



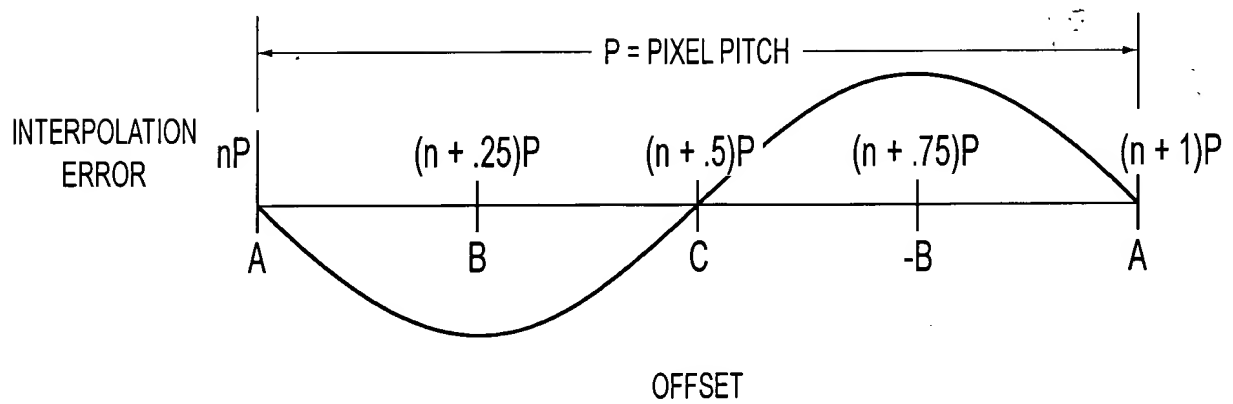
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**



**FIG. 7**



**FIG. 8**

# SINUSOIDAL COMPENSATION

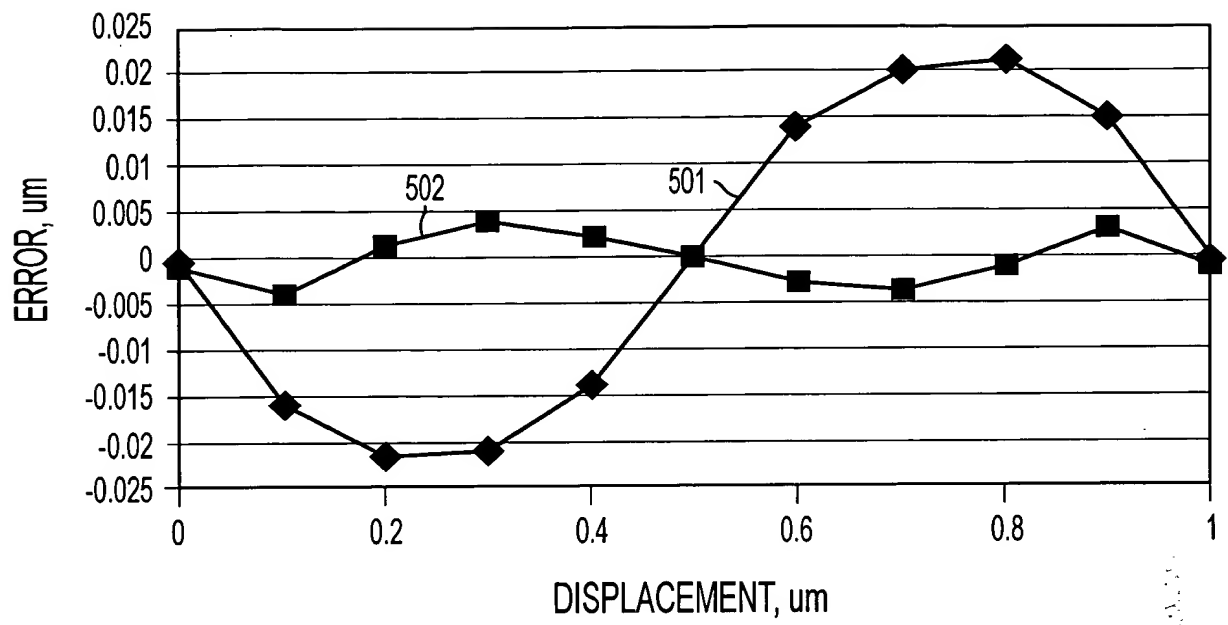
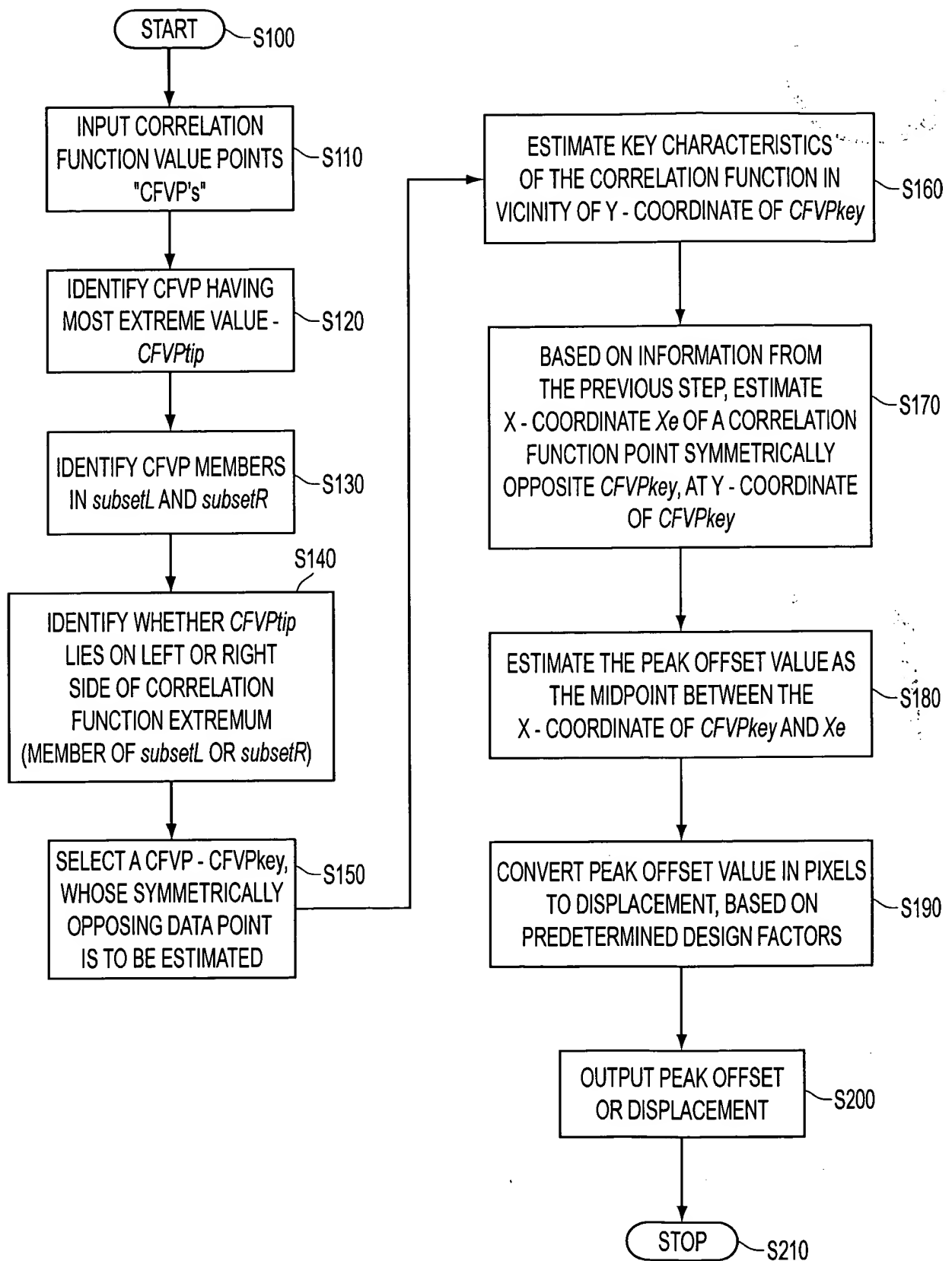
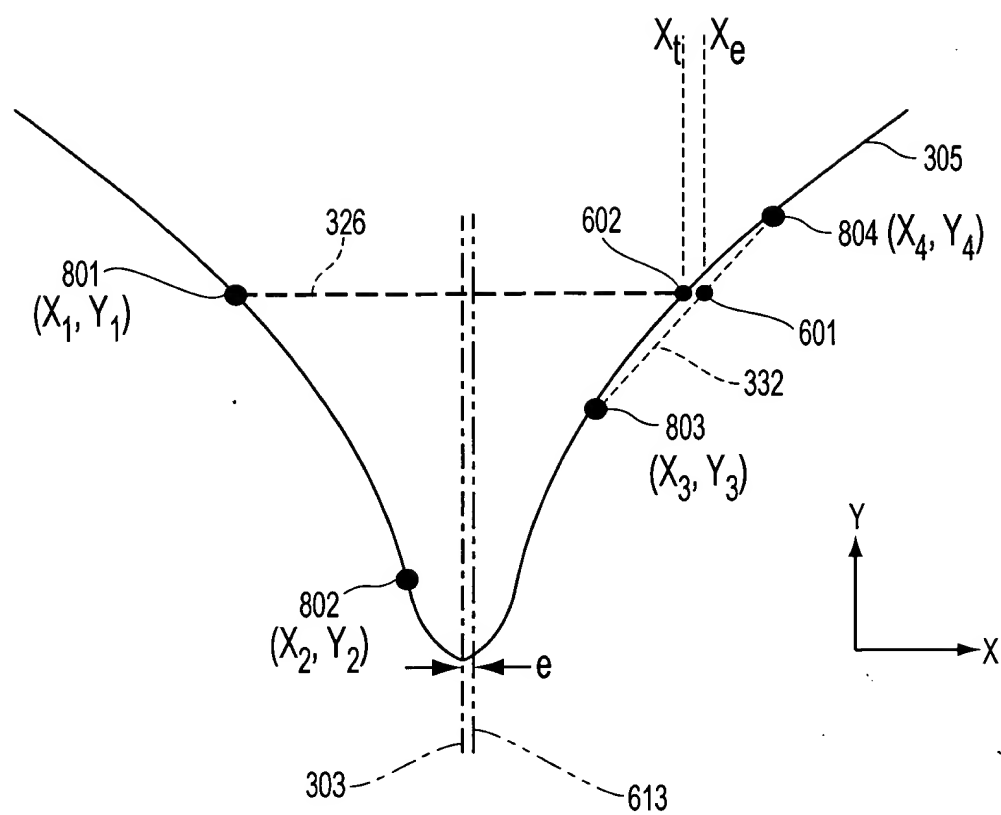


FIG. 9

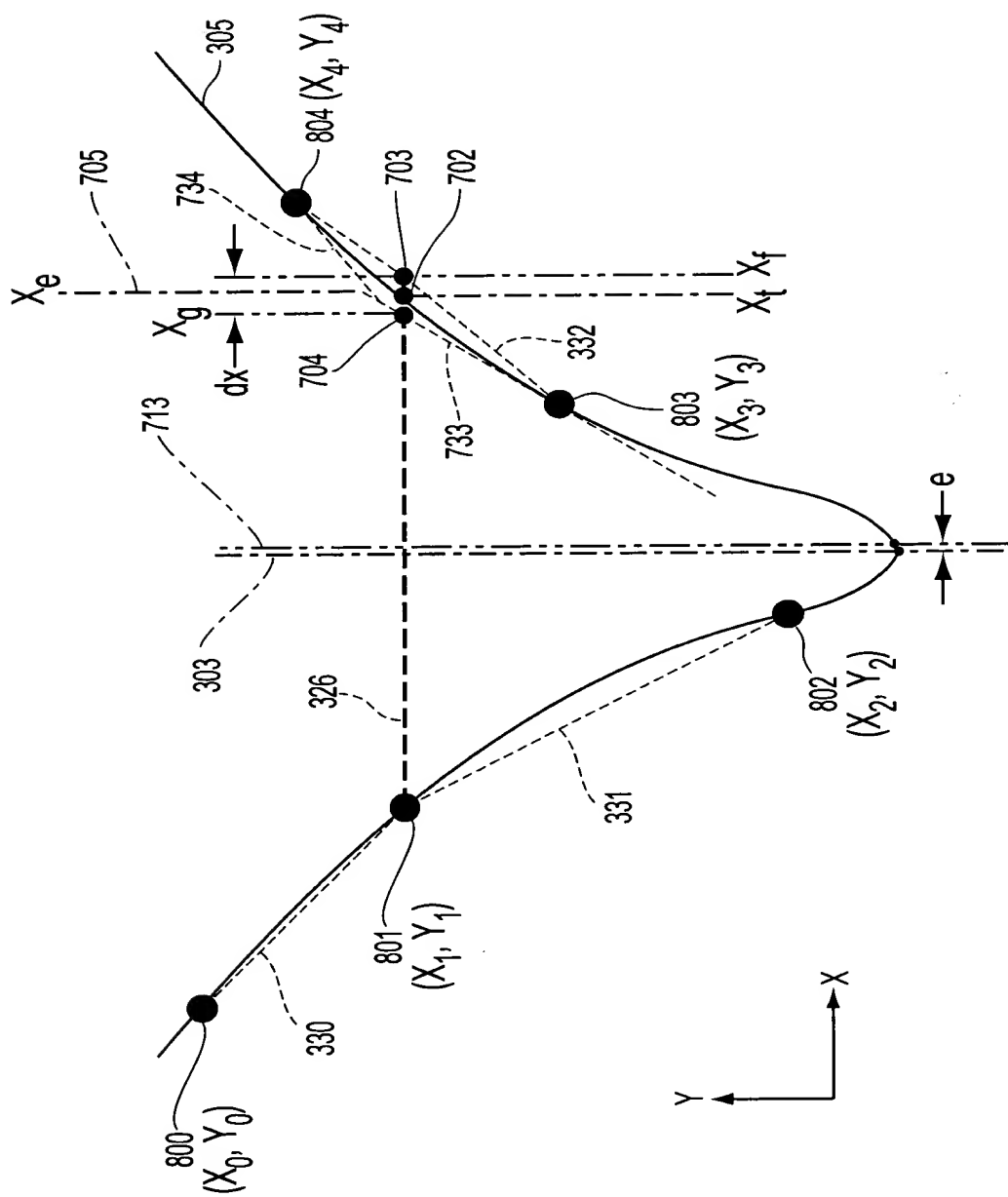


**FIG. 10**





**FIG. 11**



**FIG. 12**

PERIODIC ERRORS, PINHOLE = 1.5 mm

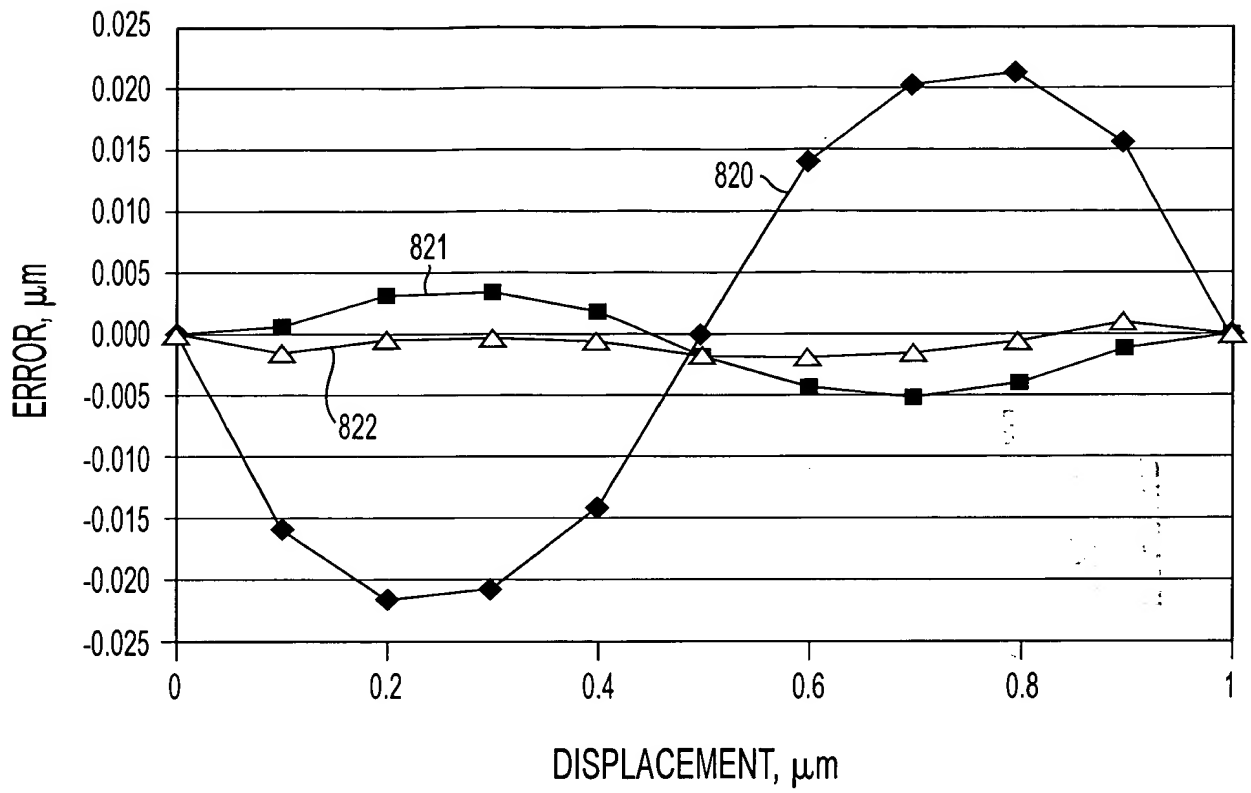


FIG. 13

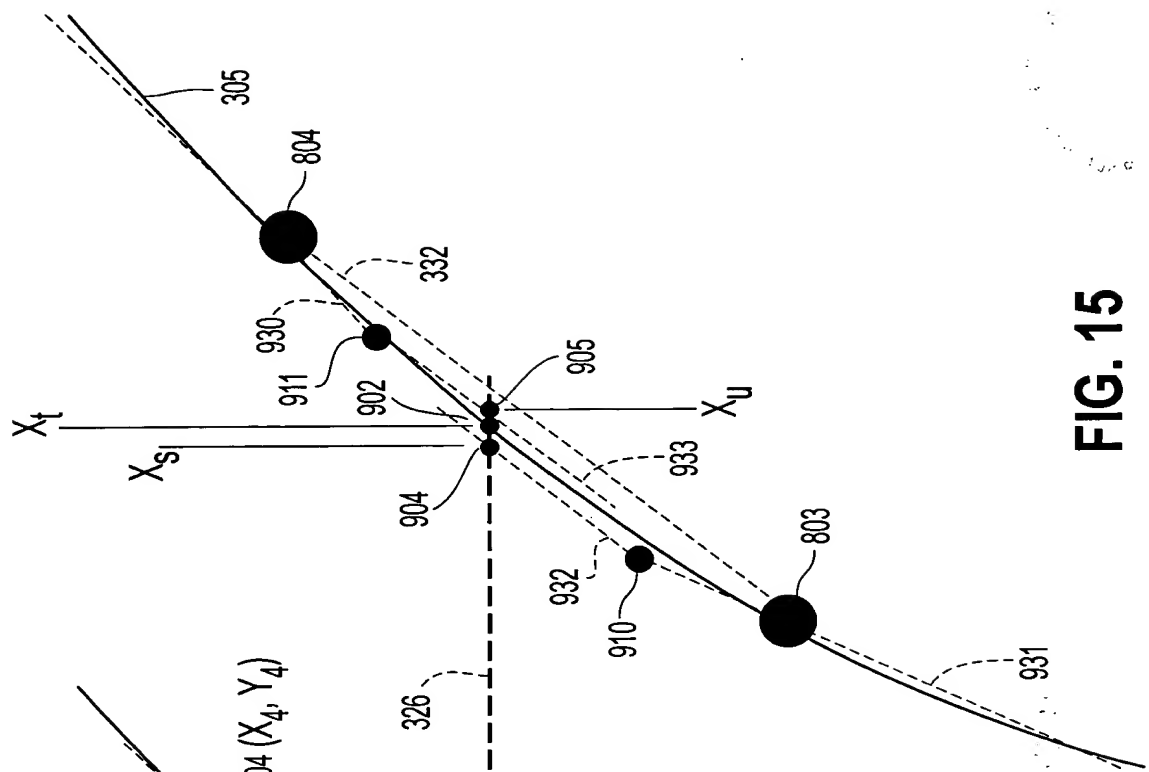


FIG. 15

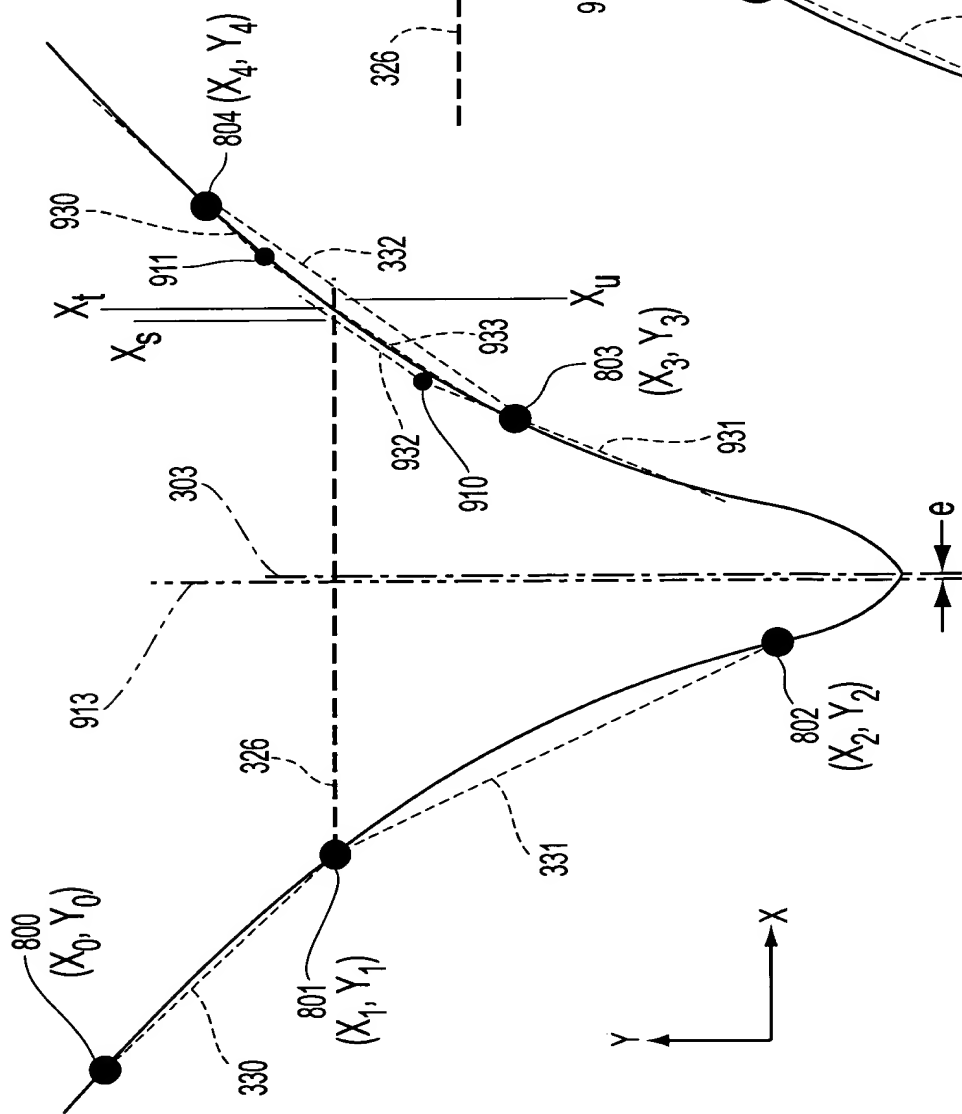
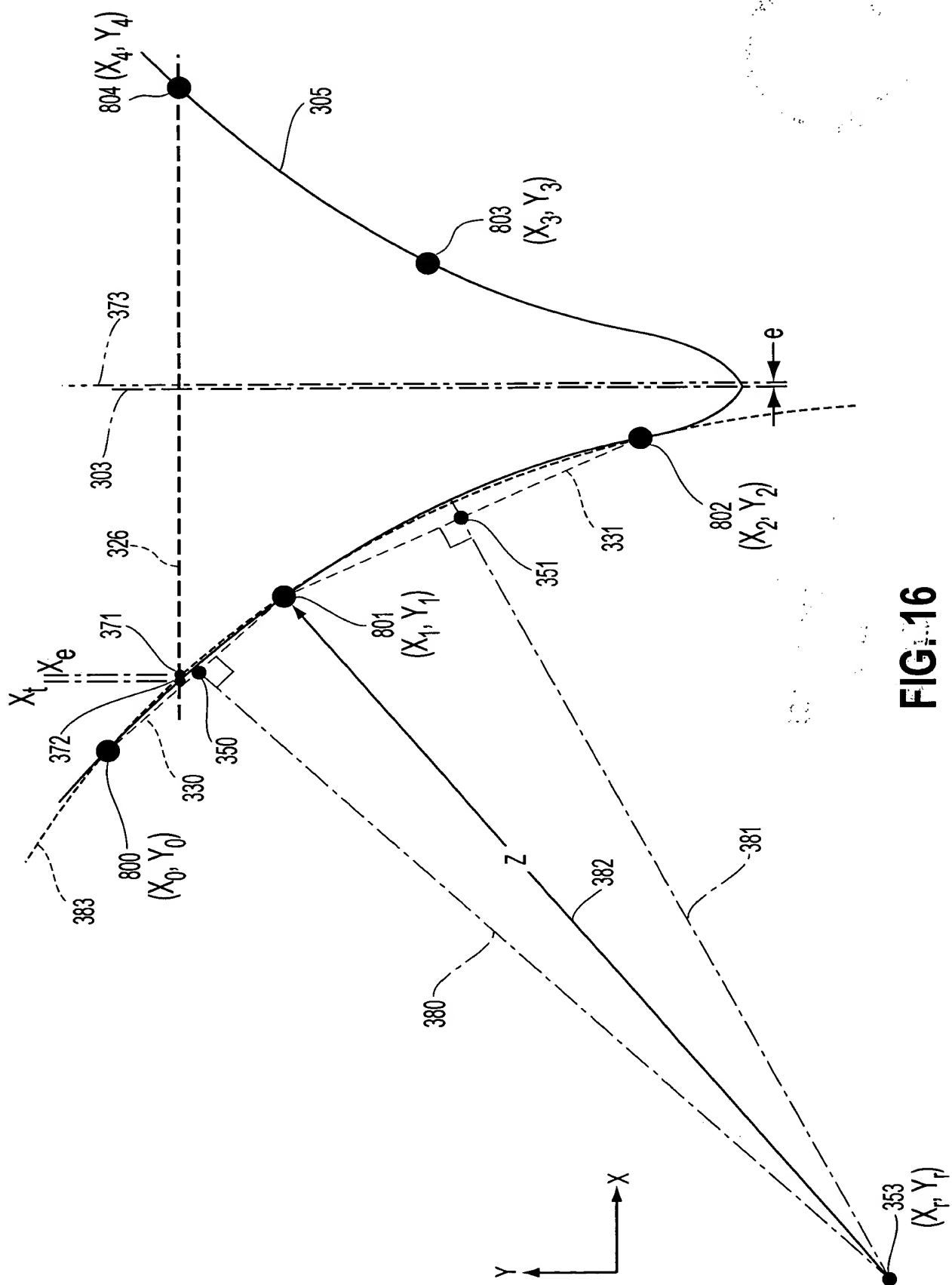
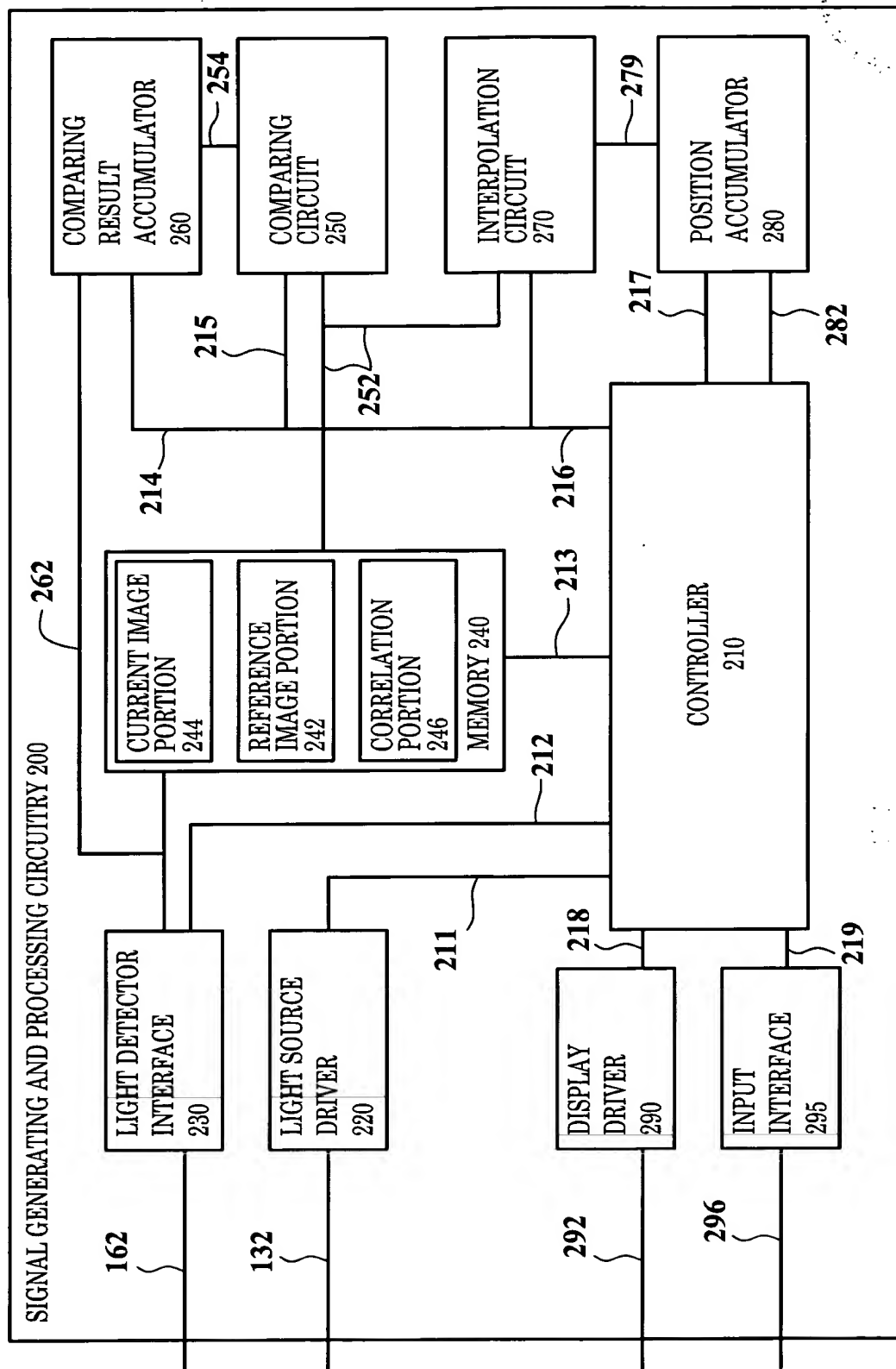
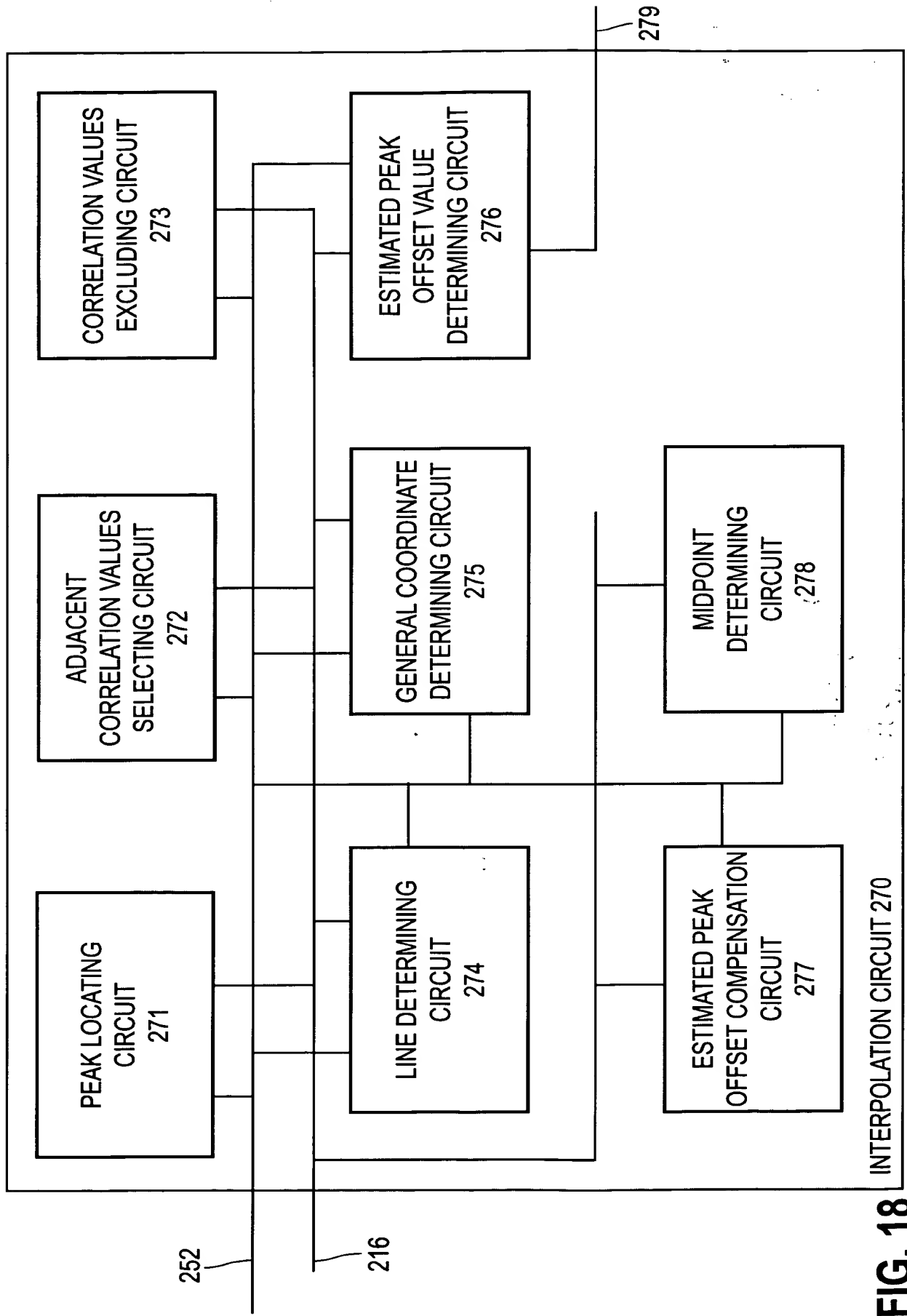


FIG. 14





**FIG. 17**

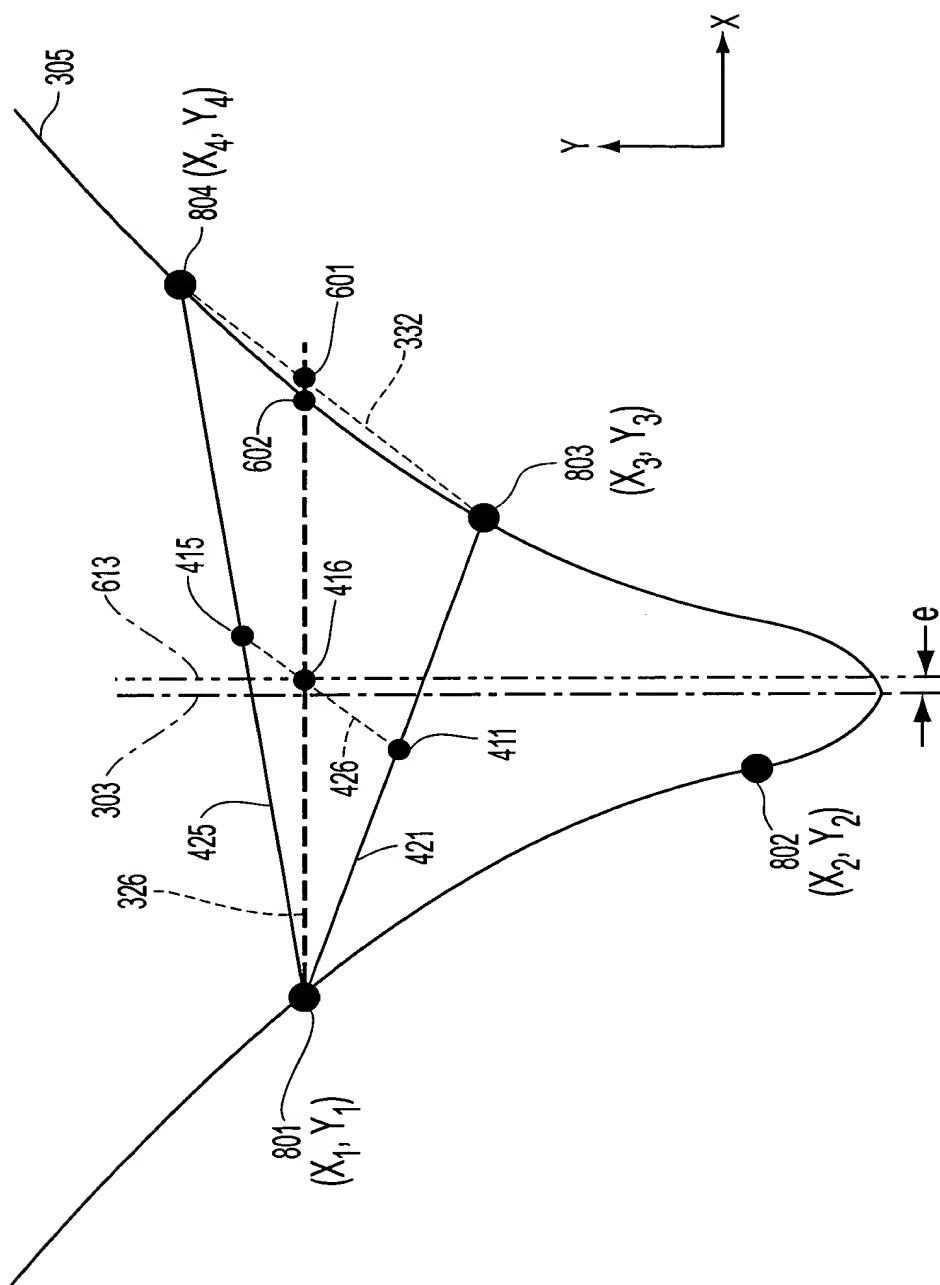


**FIG. 18**



FIG. 19





**FIG. 20**